	Exploring Aeronautics							
1997 Science								
Learning Standards								
Illinois Science								
Grades 4-5								
Activity/Lesson	State	Standards						
			Assess test results and the effectiveness of the					
			design using given criteria and noting possible					
Wings(177-208)	IL	SCI.4-5.11.B.2e	sources of error.					
Wings(177-208)	IL	SCI.4-5.11.B.2f	Report test design, test process and test results.					
Tools of			Build a prototype of the design using available					
Aeronautics(257-326)	IL	SCI.4-5.11.B.2c	tools and materials.					
			Assess test results and the effectiveness of the					
Tools of			design using given criteria and noting possible					
Aeronautics(257-326)	IL	SCI.4-5.11.B.2e	sources of error.					
Tools of								
Aeronautics(257-326)	IL	SCI.4-5.11.B.2f	Report test design, test process and test results.					
The Tools of			Build a prototype of the design using available					
Aeronautics	IL	SCI.4-5.11.B.2c	tools and materials.					
			Assess test results and the effectiveness of the					
The Tools of			design using given criteria and noting possible					
Aeronautics	IL	SCI.4-5.11.B.2e	sources of error.					
The Tools of								
Aeronautics	IL	SCI.4-5.11.B.2f	Report test design, test process and test results.					
			Formulate questions on a specific science topic					
			and choose the steps needed to answer the					
Science of Flight	IL	SCI.4-5.11.A.2a						
			Collect data for investigations using scientific					
			process skills including observing, estimating					
Science of Flight	IL	SCI.4-5.11.A.2b						
			Assess test results and the effectiveness of the					
			design using given criteria and noting possible					
Science of Flight	IL	SCI.4-5.11.B.2e	sources of error.					
		001 4 5 44 5 06						
Science of Flight	IL	SCI.4-5.11.B.2f	Report test design, test process and test results.					
			Describe the effects on society of scientific and					
0		001.4.5.40.5.01	technological innovations (e.g., antibiotics,					
Science of Flight	IL	SCI.4-5.13.B.2b	steam engine, digital computer).					
			Collect data for investigations using scientific					
Integrating with		001.4.5.44.4.01	process skills including observing, estimating					
Aeronautics	IL	SCI.4-5.11.A.2b	and measuring.					
			Explain how technology is used in science for a					
			variety of purposes (e.g., sample collection,					
Into to A			storage and treatment; measurement; data					
Intro to Aeronautics		001 4 5 40 5 5	collection, storage and retrieval; communication					
(109-123)	IL	SCI.4-5.13.B.2a						
0-1			Formulate questions on a specific science topic					
Scientific Method(124-		001 4 5 44 4 5	and choose the steps needed to answer the					
144)	IL	SCI.4-5.11.A.2a	questions.					
0-1			Collect data for investigations using scientific					
Scientific Method(124-		001 4 5 44 4 61	process skills including observing, estimating					
144)	IL	SCI.4-5.11.A.2b	and measuring.					

Scientific Method(124-			Report and display the results of individual and					
144)	IL	SCI.4-5.11.A.2e	group investigations.					
			Develop a plan, design and procedure to					
Scientific Method(124-			address the problem identifying constraints					
144)	IL	SCI.4-5.11.B.2b	(e.g., time, materials, technology).					
,			Explain how technology is used in science for a					
			variety of purposes (e.g., sample collection,					
			storage and treatment; measurement; data					
Scientific Method(124-			collection, storage and retrieval; communication					
144)	IL	SCI.4-5.13.B.2a						
,			,					
	Exploring Aeronautics							
		1997 Science Learning Standa						
Illinois Science		Learning Stands	arus					
Grades 6-8								
	State	Standards						
Activity/Lesson	State	Statiualus	Soloet the most engraprists design and build a					
\\/inac/177 200\	li .	SCI.6-8.11.B.3c	Select the most appropriate design and build a prototype or simulation.					
Wings(177-208) Tools of	IL	SCI.0-0.11.D.3C						
	li .	CCI 6 0 11 D 20	Select the most appropriate design and build a					
Aeronautics(257-326)	IL	SCI.6-8.11.B.3c	prototype or simulation.					
T16			Using available technology, report the relative					
Tools of		001 0 0 11 0 01	success of the design based on the test results					
Aeronautics(257-326)	IL	SCI.6-8.11.B.3f	and criteria.					
The Tools of			Select the most appropriate design and build a					
Aeronautics	IL	SCI.6-8.11.B.3c	prototype or simulation.					
			Using available technology, report the relative					
The Tools of			success of the design based on the test results					
Aeronautics	IL	SCI.6-8.11.B.3f	and criteria.					
			Formulate hypotheses that can be tested by					
Science of Flight	IL	SCI.6-8.11.A.3a	collecting data.					
			Conduct scientific experiments that control all					
Science of Flight	IL	SCI.6-8.11.A.3b	but one variable.					
			Collect and record data accurately using					
			consistent measuring and recording techniques					
Science of Flight	IL	SCI.6-8.11.A.3c						
			Sketch, propose and compare design solutions					
			to the problem considering available materials,					
Science of Flight	IL	SCI.6-8.11.B.3b	tools, cost effectiveness and safety.					
			Select the most appropriate design and build a					
Science of Flight	IL	SCI.6-8.11.B.3c	prototype or simulation.					
			Use data manipulation tools and quantitative					
			(e.g., mean, mode, simple equations) and					
Integrating with			representational methods (e.g., simulations,					
Aeronautics	IL	SCI.6-8.11.A.3e						
Scientific Method(124-			Formulate hypotheses that can be tested by					
144)	IL	SCI.6-8.11.A.3a	collecting data.					
Scientific Method(124-			Conduct scientific experiments that control all					
144)	IL	SCI.6-8.11.A.3b	but one variable.					
			Collect and record data accurately using					
Scientific Method(124-			consistent measuring and recording techniques					
144)	IL	SCI.6-8.11.A.3c	and media.					
Scientific Method(124-			Collect and record data accurately using consistent measuring and recording techniques					

Scientific Method(124-			Explain the existence of unexpected results in a
144)	IL	SCI.6-8.11.A.3d	data set.
Scientific Method(124-			Explain what is similar and different about
144)	IL	SCI.6-8.13.A.3c	observational and experimental investigations.